

## Coconino National Forest Plan Revision

# Air Quality and Fire

### Air Quality

#### General description

- Smoke occurs where fire is used to reduce fuels and restore fire-adapted ecosystems. Management activities that use fire are likely to increase atmospheric particulates.
- The Environmental Protection Agency, as required by the Clean Air Act (1990) as amended, has established National Ambient Air Quality Standards (NAAQS) for six pollutants to protect human health, as well as to protect against decreased visibility, damage to animals, crops, vegetation, and buildings. These standards apply to the two airsheds that overlap the forest. In addition the EPA established the Regional Haze Rule (40 CFR Part 51) (U.S. EPA 1999) for improved visibility in national parks and wilderness areas. Coconino NF overlaps a portion of the Sycamore Canyon wilderness which is a Class 1 area.
- Management activities on the Forest are coordinated with the Arizona Department of Environmental Quality, as well as with adjacent agencies, to maintain and protect the air quality in the two airsheds and the Class 1 area.

#### Desired Conditions

- Management activities do not exceed State or Federal emissions standards. Air quality on the Coconino NF meets state air quality standards including visibility and public health. Air quality related values, including high quality visual conditions, are maintained within the Class I airshed over the Sycamore Wilderness.

#### Objectives - *[none are currently identified]*

#### Guidelines

- Project design for prescribed burns and strategies for wildfires should incorporate as many Emission Reduction Techniques listed in Arizona Revised Statute (ARS) 18-2-15 as are feasible to reduce negative impacts to air quality, subject to economic constraints, technical feasibility, safety criteria, and land management objectives.
- Decision strategies and documents for wildfires and prescribed burns should identify smoke sensitive receptors, and include objectives and courses of action to mitigate impacts to those receptors when feasible. A smoke sensitive receptor is *[still need to define from NWCG glossary of terms]*.
- The public should be notified through methods, such as smoke warning signs along roads when visibility may be reduced due to wildland fire.

## Management Approach

- Coordinate with Arizona Department of Environmental Quality (ADEQ) during prescribed burns to comply with State and Federal regulatory requirements for emissions and impacts to Class I and II airsheds.
- Coordinate with ADEQ during wildfire to ensure ADEQ is aware of potential smoke impacts to receptors.

## Other Information

Arizona Revised Statute Title 18-Environmental Quality, Chapter 2-Air Pollution Control, Article 15-Forest and Range Management Burns (2004) at  
<http://www.azdeq.gov/environ/air/smoke/download/prules.pdf>

## Fire

### General description

- Wildland fire is any non-structure fire that occurs in the wildlands. That includes unplanned human and naturally caused fires and planned ignitions (prescribed fire).
- Most of the vegetation on the forest is adapted to the recurrent wildland fires started by lightning from spring and summer thunderstorms. Frequent, low-intensity fire plays a vital role in maintaining ecosystem health. Fire, both prescribed and wildfire, if properly managed, is a tool for restoring the forest's fire-adapted ecosystems.

### Desired Conditions

- Wildland fires move ecosystems toward their desired conditions and burn within the range of intensity and frequency of the historic fire regime of the vegetation communities affected. Uncharacteristic high severity fires rarely occur, and do not burn at the landscape scale, except where this is part of the historical fire regime.
- Wildland fires in the Wildland-Urban Interface (WUI) are low intensity surface fires. Residents living within and adjacent to the forest are knowledgeable about wildfire protection of their homes and property, including providing for defensible space. Wildland fires in the WUI do not result in the loss of life, property or ecosystem function.
- People understand that wildland fire is a necessary natural disturbance process integral to the sustainability of the forest's fire adapted vegetation communities.
- Wildfires are safely managed across most of the landscape for the resource benefits they provide.

### Objectives - *[none are currently identified]*

## Guidelines

- In cases where wildfires occur in areas approved for prescribed fire use, wildfire may be utilized to achieve the approved burning activities in that area. *[Will need to clarify whether this statement is needed.]*
- Areas around private land and development should be a high priority for fire treatment.

## Standards

- Public and firefighter safety are the highest priority in managing fire.

## Management Approach

- Where possible, manage wildland fires for multiple resource management objectives.
- Integrate fire with other management tools to treat and restore fire adapted ecosystems.
- Coordinate with other jurisdictions such as communities, service providers (infrastructure), counties, federal, tribal, state and local entities regarding prevention, preparedness, planned activities and responses to wildland fires. Notify the above regarding the upcoming and, ongoing fire season and any prescribed fire activity.